

ECAT Chemistry Chapter 3 Gases Online Test

Sr	Questions	Answers Choice
1	A graph b/w P and 1/V at constant temperature and number of moles is parallel to :	A. None of above B. X-axis C. Z-axis D. Y-axis
2	A graph b/w P and 1/V at constant temperature and number of moles is parallel to :	A. Y-axis B. Z-axis C. X-axis D. None of above
3	Boyle's law doesn't fail even :	A. Temperature is extremely high B. Pressure is extremely high C. Mixture of gas is taken D. All of above
4	According to Boyle's law, which parameters give a straight line parallel to axis-s, when we plot a graph between:	A. V and T B. P and V C. P and 1/V D. P and PV
5	Boyle's law is represented as :	A. $P \propto 1/T$ B. $V \propto 1/P$ C. $P \propto 1/P$ D. $P \propto 1/P$
6	For a gas obeying Boyle's law if pressure is doubled, the volume becomes :	A. Remain constant B. Double C. One half D. None of above
7	In Boyle's law which of the following pair is variable :	A. Temperature and quantity of a gas. B. Pressure and volume C. Volume and quantity of a gas. D. Pressure and quantity of a gas.
8	In Boyle's law which of the following pair remains constant :	A. Temperature and quality of a gas. B. Pressure and quality of a gas. C. Temperature and pressure D. Temperature and quantity of a gas.
9	The relation ships b/w volume of given amount of gas and prevailing conditions of temperature and pressure are :	A. Charles's law B. Graham's law C. Boyle's law D. Gas law
10	The intramolecular force in gases are :	A. Weak B. Normal C. Very weak D. Strong
11	Liquids are less common than :	A. Solids B. Plasmas C. Gases D. All of above
12	Gases shows uniform behavior toward their :	A. Internal conditions B. External conditions C. Internal and external conditions D. None of above
13	Cooling happens under the Joule Thomson Effect due to sudden :	A. Contraction B. Absorption C. Expansion D. All of above
		A. Rotational kinetic energies B. $\text{Rotational kinetic energies}$ C. $\text{Rotational kinetic energies}$ D. $\text{Rotational kinetic energies}$

14	In solids, the temperature of is the measure of	<p>initial; background-attachment: initial; background-origin: initial; background-clip: initial; ">transnational kineticenergies C. Vibrationalkineticenergies D. None of the above</p>
15	In gases and liquids, temperature is the measure of :	<p>A. Average transnational kinetic energies of molecules. B. Average vibrational kinetic energies of molecules. C. Average rotational kinetic energies of molecules. D. None of above</p>
16	The rate of diffusion of a gas is :	<p>A. Inversely proportional to its density B. Inversely proportional to square root of its molecular mass C. Directly proportional to molecular mass D. Directly proportional to its density</p>
17	Gases of air always remain in random motion and do not settle due to :	<p>A. Difference in molecular masses of air gases. B. Difference in partial pressure of gas molecules. C. Unequal number of different gas molecules. D. Elastic collision of gas molecules.</p>
18	Gases exert pressure on walls of container because the gas molecules :	<p>A. Obey gas laws. B. Have definite volume. C. Collide with the walls of container. D. Collide with each other.</p>
19	All gases can be compressed by :	<p>A. Keeping constant pressure B. Decreasing pressure C. Increasing pressure D. None of the above</p>
20	The movement of molecules from a region of high pressure to vacuum is called :	<p>A. Evaporation B. Effusion C. Conduction D. Difusion</p>
21	Which statement about gases is not correct ?	<p>A. The spread throughout the vessel. B. Pressure is due to collision C. There are large spaces between the molecules. D. molecules are arranged regularly.</p>
22	Which of the following is the simplest form of matter?	<p>A. Gaseous state B. Liquid state C. Solid state D. All of above</p>
23	A real gas obeying van der Waals' equation will resemble ideal gas if :	<p>A. both 'a' and 'b' are large B. both 'a' and 'b' are small C. 'a' is small and 'b' is large D. 'a' is large and 'b' is small</p>
24	The deviation of a gas from ideal behavior is maximum at :	<p>A. -10°C and 5.0 atm B. -10°C and 2.0 atm C. 100°C and 2.0 atm D. 0°C and 2.0 atm</p>

A. -10<span style="font-size:11.0pt;line-

25	The deviation of a gas from ideal behavior is maximum at :	<p>height:107%; font-family:"Calibri";,sans-serif;mso-ascii-theme-font:minor-latin;mso-fareast-font-family:Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:"Times New Roman";mso-bidi-theme-font:minor-bidi; mso-ansi-language:EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">°C and 5.0 atm B. -10°C and 2.0 atm C. 100°C and 2.0 atm D. 0°C and 2.0 atm</p>
26	Gases deviate from ideal behavior at high pressure. Which of the following is correct for non-ideality ?	<p>A. At high pressure, the gas molecules move in one direction only. B. At high pressure, the collisions between the gas molecules are increased manifold. C. At high pressure, the volume of gas becomes insignificant. D. At high pressure, the inter molecular attraction become significant.</p>
27	Equal masses of methane and oxygen are mixed in an empty container at 25°CThe fraction of total pressure exerted by oxygen is :	<p>A. 1/2 B. 8/9 C. 1/9 D. 16/17</p>
28	The order of the rate of diffusion of gases NH ₃ , SO ₂ , CL ₂ , and CO ₂ IS :	<p>A. NH₃ > SO₂ > CL₂ > CO₂ B. NH₃ > CO₂ > SO₂ > CL₂ C. CL₂ > SO₂ > CO₂ > NH₃ D. NH₃ > CO₂ > CL₂ > SO₂</p>
29	The molar value of CO ₂ is maximum at :	<p>A. STP B. 127°C and 1 atm C. 0°C and 2 atm D. 273°C and 2 atm</p>
30	How should condition be changed to prevent the volume of a given gas from expanding whine its mass is increased ?	<p>A. Temperature is lowered and pressure is increased B. Temperature is increasedand pressure is lowered C. Temperature and pressure both are lowered D. Temperature and pressure both are increased</p>